Title: Method and Apparatus for Forming a Multiple Bundle Hinged Lid Hinged Cigarette Pack

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I claim:

1. A cigarette packing machine for creation of separate foil wrapped bundles,

comprising:

a first and a second cigarette packing machine, said first cigarette packing machine creating a first foil wrapped cigarette bundle surrounded by a first inner

frame, said second cigarette packing machine creating a second foil wrapped

cigarette bundle surrounded by a second inner frame;

a third cigarette packing machine, said third cigarette packing machine

receiving said first foil wrapped cigarette bundle and said second foil wrapped

cigarette bundle in face-to-face overlaying relationship, said third cigarette

packing machine partially surrounding said first and said second foil wrapped

cigarette bundle with an outer frame, said outer frame having a hinge line along a

mating side edge of said first cigarette foil wrapped bundle and said second

cigarette foil wrapped bundle.

2. The cigarette packing machine of claim 1 wherein said first cigarette packing

machine and said second cigarette packing machine each have a cigarette receiving station, a foil

wrapping station, an inner frame blank conveyor, a transferring conveyor and a drying drum.

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3. The cigarette packing machine of claim 1 wherein said third cigarette packing

machine has a conveyor transfer station having a first transfer plunger and a second transfer

plunger, said first plunger crossing a conveyor line from said first cigarette packing machine, said

second plunger crossing a conveyor line from said second cigarette packing machine, both said

first and said second plunger depositing cigarette packs onto a combination conveyor.

4. An apparatus for forming a multiple bundle hinged lid cigarette pack, comprising:

a first cigarette bundle wrapping machine forming a first bundle of cigarettes wrapped in

a first inner frame and having a foil wrapping station and blank chute adjacent a blank conveyor,

a drying drum and an exit conveyor;

a second cigarette bundle wrapping machine forming a second bundle of cigarettes

wrapped in a second inner frame and having a foil wrapping station, a blank chute adjacent a

blank conveyor, a drying drum and a second exit conveyor;

a convey combination station wherein said first exit conveyor and said second exit

conveyor; and,

a third cigarette bundle wrapping machine having a combined bundle conveyor, an outer

frame chute holding a plurality of outer frames adjacent a blank conveyor, a drying drum and a

cutting mechanism.

5. The apparatus for forming a multiple bundle hinge lid cigarette pack of claim 4

wherein said second exit conveyor has an inverting station.

- 6. The apparatus of claim 4 wherein said first bundle of cigarettes contain seven
- cigarettes.
- 7. The apparatus of claim 4 wherein said second bundle of cigarettes contain thirteen
- cigarettes.
- 8. The apparatus of claim 4 wherein said first exit conveyor and said second exit
- conveyor meet at a first and a second actuator adjacent said combined bundle conveyor.
- 9. The apparatus of claim 8 wherein said first actuator has a plunger that sweeps
- across said first exit conveyor and said second actuator has a plunger that sweeps across said
- second exit conveyor.
- 10. The apparatus of claim 9 wherein said first bundle of cigarettes and said second
- bundle of cigarettes are positioned face-to-face on said combined bundle conveyor.
- 11. The apparatus of claim 4 wherein said cutting mechanism is positioned adjacent
- an exit of said drying drum on said third cigarette wrapping machine.
- 12. The apparatus of claim 11 wherein said cutting mechanism slits a bottom panel of
- said outer frame.
- 13. The apparatus of claim 4 wherein said outer frame forms a hinged lid for said
- multiple bundle hinged lid cigarette pack.
 - 14. The apparatus of claim 4 wherein said first bundle of cigarette wrapped in a first

inner frame and said second bundle of cigarettes wrapped in a second inner frame are in hinged

side-by-side relationship in hinge about a vertical hinge line.

15. An apparatus for making a hinged lid side-by-side hinged cigarette pack

comprising:

a first cigarette machine producing a first foil wrapped bundle, said first cigarette

wrapping machine having a foil wrapping station, an inner frame blank chute for holding a first

inner frame, a blank conveyor, a drying drum and an exit conveyor adjacent said drying drum;

a second cigarette wrapping machine producing a second foil wrapped bundle, said

second cigarette wrapping machine having a foil wrapping station, an inner frame blank chute for

holding a second inner frame, a blank conveyor, a drying drum and an exit conveyor adjacent

said drying drum;

said first cigarette wrapping machine exit conveyor and said second cigarette wrapping

machine exit conveyor ending at a conveyor combination station having a first actuator adjacent

said first cigarette wrapping machine exit conveyor and a second actuator adjacent said second

cigarette wrapping machine exit conveyor;

a combination conveyor at said conveyor combination station and entering into said third

cigarette wrapping machine;

said third cigarette wrapping machine receiving said combined conveyor, said combined

conveyor ending at an outer frame chute for holding an outer frame, said outer frame chute

adjacent a blank conveyor on said third conveyor cigarette wrapping machine, said third cigarette

wrapping machine further having a drying drum and a cutting mechanism adjacent said drying

drum.

- 16. The apparatus of claim 15 wherein said first foil wrapped cigarette bundle has seven cigarettes.
- 17. The apparatus of claim 15 wherein said second foil wrapped bundle of cigarettes has thirteen cigarettes.
- 18. The apparatus of claim 15 wherein said second cigarette wrapping machine exit conveyor has an inverting turn.
- 19. The apparatus of claim 15 wherein said combination station combine said first foil wrapped bundle and said second foil wrapped bundle in layered face-to-face relationship.
- 20. The apparatus of claim 15 wherein said first cigarette wrapping machine wraps said first foil wrapped bundle in said inner frame, said second cigarette wrapping machine wraps said second foil wrapped bundle in said second inner frame.
- 21. The apparatus of claim 20 wherein said outer frame forms a hinged lid and has a hinge line vertically connecting said first foil wrapped cigarette bundle and said second foil wrapped cigarette bundle.
- 22. A cigarette packing machine for creating separate foil wrapped bundles and forming a hinged lid side-by-side hinge pack comprising:

a first cigarette wrapping machine having means for forming a first foil wrapped bundle with a first inner frame;

means for forming a second foil wrapped bundle with a second inner frame;

a combination conveyor receiving said first foil wrapped bundle and said second foil wrapped bundle in face-to-face layered relationship;

a third cigarette wrapping machine wrapping an outer frame around said first foil wrapped bundle and said second foil wrapped bundle such that they hinge along a vertical hinge line by adhering a hinged panel of said outer frame on a side panel of said first foil wrap bundle.

- 23. The packing machine of claim 22 wherein said means for forming a first foil wrapped bundle include a first inner frame chute adjacent a first inner frame blank conveyor, a plurality of folding stations in a drying drum.
- 24. The cigarette packing machine of claim 23 wherein said means for forming a first foil wrapped bundle further includes a cigarette intake chute and a foil wrapping station.
- 25. The cigarette packing machine of claim 22 wherein said means for forming a second foil wrap bundle with a second inner frame includes a second inner frame chute adjacent a second inner frame blank conveyor, a plurality of folding stations and a drying drum.
- 26. The cigarette packing machine of claim 25 wherein said means for forming a second foil wrapped bundle with a second inner frame further includes a cigarette intake chute and a foil wrapping station.
- 27. The cigarette packing machine of claim 22 wherein said first foil wrapped bundle has seven cigarettes.
- 28. The cigarette packing machine of claim 22 wherein said second foil wrapped bundle has thirteen cigarettes.
- 29. A method of forming a hinged lid side-by-side vertically hinged cigarette pack, comprising:

forming a first foil wrapped bundle of cigarettes having a first inner frame member;

forming a second foil wrapped bundle of cigarettes having a second inner frame member;

transporting said first foil wrapped bundle and said second foil wrapped bundle to a

wrapping machine in combined relationship;

partially surrounding said combined first foil wrapped bundle in said second foil wrapped

bundle with an out frame;

adhesively applying a vertical hinge panel of said outer frame to said first foil wrapped

bundle thereby allowing said combined first foil wrapped bundle and said second foil wrapped

bundle to hinge about a vertical hinge line.

30. The method of claim 29 further comprising cutting a bottom panel of said outer

frame in half to allow said first foil wrapped bundle and said second foil wrapped bundle to

separate about said hinge line.

31. A method of forming a multiple bundle hinged cigarette pack comprising:

forming a seven cigarette bundle;

wrapping said seven cigarette bundle in foil;

creating a seven cigarette bundle inner frame carton containing said seven cigarette

bundle;

forming a thirteen cigarette bundle;

wrapping said thirteen cigarette bundle in foil;

creating a thirteen cigarette bundle inner frame carton containing said thirteen cigarette

bundle;

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conveying said thirteen cigarette bundle inner frame carton and said seven cigarette

bundle inner frame to a combining station;

combining said thirteen cigarette bundle inner frame carton and said seven cigarette

carton in face-to-face relationship to form a combined cigarette bundle;

forming an outer frame over said combined cigarette bundle;

adhering a hinge panel on said outer frame to one of said thirteen or said seven cigarette

bundle inner frame carton such that combined cigarette bundle hinges about a vertical hinge line.